

February 15, 2007

**CERTIFIED RETURN RECEIPT 7000 1670 0005 6151 3468**

Mike Galante, Manager  
North Kootenai Water and Sewer District  
1841 West Hayden Avenue  
Hayden, ID 83835

**RE: Draft Wastewater Reuse Permit LA-000143-01 for Gozzer Ranch Golf and Lake Club**

Dear Mr. Galante:

Enclosed please find a copy of the 14-page draft Wastewater Reuse Permit prepared by this office for the Gozzer Ranch Golf and Lake Club wastewater reuse system. This draft Reuse Permit is in the same form as a final permit and specifies conditions of operation and management which will be required for the issuance of the permit intended to protect the environment and the public health from any hazard potential presented by the proposed Gozzer wastewater treatment system.

Also enclosed please find a copy of the 6-page staff analysis memorandum prepared by DEQ intended to state the principal facts and the significant questions considered in preparing the draft permit conditions and a summary of the basis for draft conditions with references to applicable requirements and materials.

Please review the draft Reuse Permit and staff analysis and provide this office with written comments. We ask that comments specifically relate to the relationship of the permit requirement to the Idaho Rules for Reclamation and Reuse of Municipal and Industrial Wastewater (IDAPA 58.01.17) and include justification for any proposed modifications to conditions in the draft Reuse Permit. When we receive comments on the draft Reuse Permit, we plan to respond in writing to those making comment with a decision regarding each individual comment. We welcome comments from the project developer, design engineers, and district.

At the same time DEQ will be providing notice to the public of the issuance of a draft permit for Gozzer and inviting the public to provide written comments for a period of time and in a manner specified in the notice. These comments may be handled like comments received by the district, developers, and design engineers.

DEQ intends to issue a final permit decision in writing to the North Kootenai Water and Sewer District within sixty (60) days from the issuance of the draft permit. In the event a compelling written request to extend the public comment period is received, DEQ may extend the 60 day comment period and issue a final permit decision at a later date.

Sincerely,

Gary J. Gaffney, P.E.

Enclosure (draft Reuse Permit 2/15/2007 and Staff Analysis memorandum 2/15/2007)

c: Andy Holloran, Discovery Land Company, 820 E Sherman Ave., Coeur d'Alene, ID 83814 (w/enc/)  
Steven Cordes, Welch Comer and Associates, CdA (w/enc.)

**Draft**  
**MUNICIPAL AND INDUSTRIAL**  
**WASTEWATER REUSE PERMIT**  
**LA-000143-01**  
**Gozzer Ranch Golf and Lake Club**

North Kootenai Water and Sewer District, P.O. Box 2290, 1841 West Hayden Avenue, Hayden ID 83835 (Permittee) IS HEREBY AUTHORIZED TO OPERATE A MUNICIPAL WASTEWATER RECLAMATION AND REUSE SYSTEM IN ACCORDANCE WITH THE RULES FOR THE RECLAMATION AND REUSE OF MUNICIPAL AND INDUSTRIAL WASTEWATER (IDAPA 58.01.17), WASTEWATER RULES (IDAPA 58.01.16), GROUND WATER QUALITY RULE (IDAPA 58.01.11), AND ACCOMPANYING PERMIT APPENDICES AND REFERENCE DOCUMENTS.

THIS PERMIT IS EFFECTIVE FROM THE DATE OF SIGNATURE AND EXPIRES ON \_\_\_\_\_, 2012.

\_\_\_\_\_  
Gwen P. Fransen, Regional Administrator  
Idaho Department of Environmental Quality

Signed this \_\_\_\_\_ day of \_\_\_\_\_, 2007

**STATE OF IDAHO**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
2110 Ironwood Parkway,  
Coeur d'Alene, Idaho 83814  
(208) 769-1422  
(208) 769-1404 fax

**POSTING ON SITE RECOMMENDED**

## **B. Permit Contents and Reference Documents**

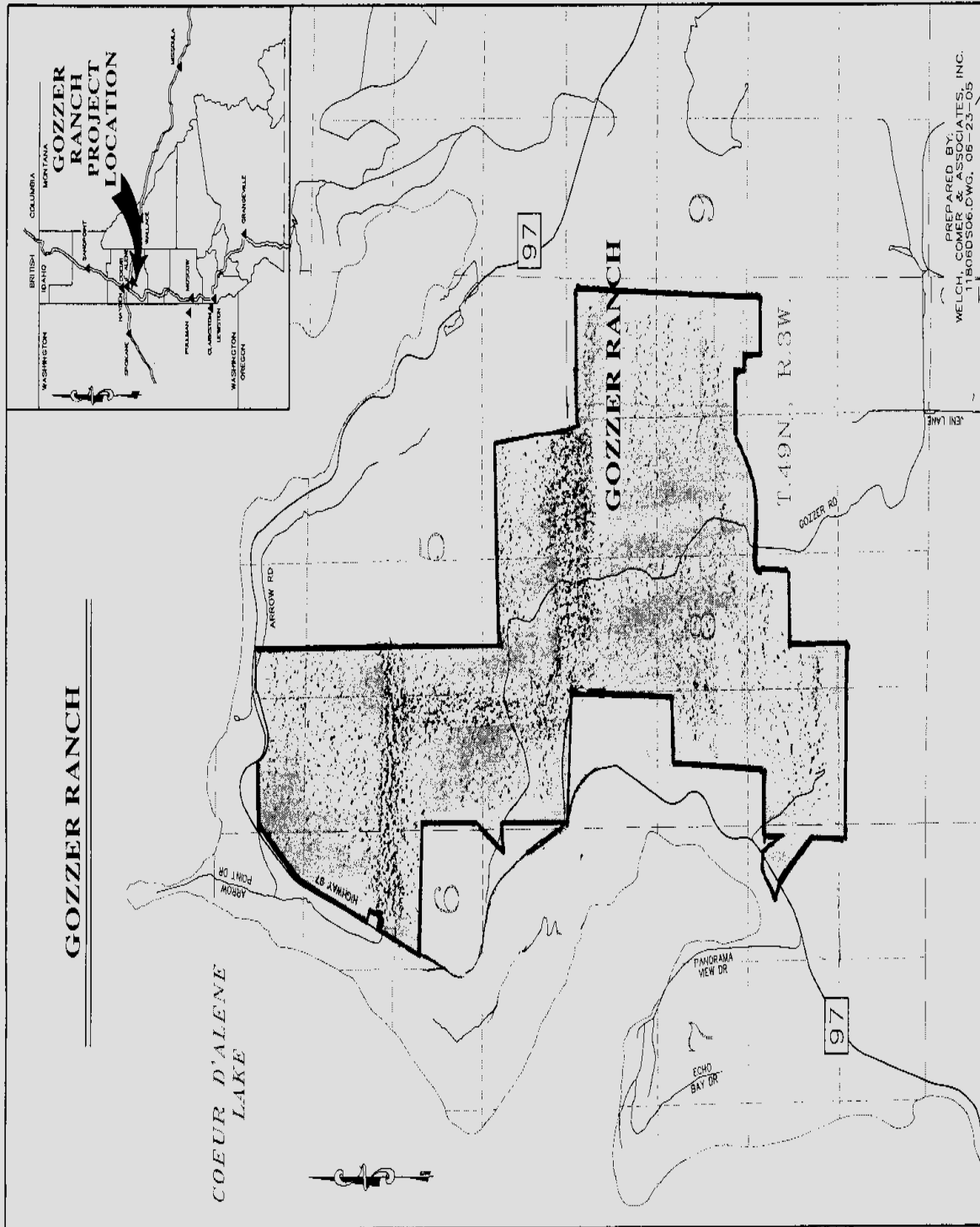
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The Sections, Appendices, and Reference Documents listed on this page are all elements of the Wastewater Reuse Permit and are enforceable as such. This permit does not relieve the permittee from responsibility for compliance with other applicable federal, state or local laws, rules, standards or ordinances.

## C. Facility Information

<b>Legal Name of Permittee</b>	North Kootenai Water and Sewer District
<b>Type of Waste</b>	Class A municipal wastewater
<b>Method of Treatment</b>	Membrane Biological Reactor utilizing USFilter-Memcor MemJet Xpress 100 package membrane filtration system followed by ultraviolet disinfection.
<b>Type of Facility</b>	Municipal wastewater from residential development
<b>Site Acres</b>	Over 600 acres of residential development including 121.72 acres of golf course available for wastewater reuse.
<b>Facility Location</b>	Kootenai County, Idaho East of Arrow Point above Lake Coeur d'Alene
<b>Legal Location</b>	Portions of Sections 5, 6, 7, and 8, T49N, R3W, Boise Meridian
<b>County</b>	Kootenai
<b>USGS Quad</b>	Mica Bay and Mount Coeur d'Alene
<b>Soils on Site</b>	See information in the <i>Preliminary Technical Report for Land Application, Gozzer Ranch Development and Golf Course</i> dated June 2005. Silt, silt with sand, and silty sand with gravel topsoils with basalt bedrock encountered in all test pits.
<b>Depth to Ground Water</b>	Unknown. Well logs in the vicinity suggest groundwater may be encountered in fractures or interbed zones of the basalt bedrock at depths ranging from 50 to 200 feet bgs.
<b>Beneficial Uses of Ground Water</b>	Drinking water. The Arrow Point drinking water system utilizes two ground water wells located between the development and Lake Coeur d'Alene. These wells are possible receptors of impacts of wastewater reuse in the development.
<b>Nearest affected Surface Water</b>	Intermittent tributaries to Lake Coeur d'Alene and Lake Coeur d'Alene. The lake is located approximately 350 feet in elevation below and more than 1000 feet horizontally west from the Gozzer Ranch boundary.
<b>Beneficial Uses of Surface Water</b>	Drinking Water
<b>Facility Contact Persons Mailing Address Phone/Fax Number</b>	Mike Galante, Manager or Jason Wereley, Licensed Operator [WWT3-13344 & WWWTLA-13942 at (208)661-9299 cell] North Kootenai Water and Sewer District PO Box 2290, 1841 West Hayden Avenue Hayden Idaho 83835 (208) 772-3619 (208) 762-0355 fax

## D. Site Map



## E. Environmental Monitoring Serial Numbers

Computerized Data Reporting Serial Number Key

HYDRAULIC MANAGEMENT UNITS		
Description	Acres	Serial No.
Gozzer Ranch Golf Course	122	MU-0143-01

WASTEWATER SAMPLING POINTS	
Description	Serial No.
Discharge from membrane filtration inside treatment building (Point of turbidity compliance)	WW-0143-01
Discharge following filtration and ultraviolet disinfection inside the treatment building (Point of disinfection compliance)	WW-0143-02

WASTEWATER STORAGE FACILITIES		
Description	Location	Serial No.
Bypass Storage Lagoon 1 MG	Wastewater Treatment Plant (WWTP)	LG-0143-01
Sludge Storage Tank 50,000 gallons	Wastewater Treatment Plant (WWTP)	LG-0143-02
Golf Irrigation Pond 7.8 MG	8,280 feet south of WWTP site	LG-0143-03

## **F. Reference Documents incorporated or to be incorporated into the Permit**

1. Construction Plans and Specifications and Record Drawings for the Gozzer Ranch Golf and Lake Club as approved by the Department in accordance with Section 39-118 of Idaho Code.
2. "Preliminary Technical Report for Land Application, Gozzer Ranch Development and Golf Club" as submitted to Discovery Land Co. on June 2005 as prepared by Welch Comer and Associates.
3. Utility User Agreement as executed between North Kootenai Water and Sewer District as owner and operator of the wastewater treatment system and Discovery Land Company as owner and operator of the irrigation systems serving the Gozzer Ranch Golf and Lake Club development. This agreement is required by IDAPA 58.01.17.601.08.g acknowledging origin of the Class A effluent and agreeing to agronomic application of the Class A effluent irrigation water.

## G. Compliance Schedule For Required Activities

The Activities in the following table shall be completed on or before the Completion Date unless modified by the DEQ in writing.

Compliance Activity Number Completion Date	Compliance Activity Description
CA-00143-01 July 1, 2007	Provide evidence of legal ownership of the entire Gozzer Ranch Lake and Golf Club wastewater system by North Kootenai Water and Sewer District.
CA-00143-02 July 1, 2007	Execute, record with Kootenai County, and provide to the Department a copy of the Utility User Agreement between North Kootenai Water and Sewer District and Discovery Land Company as required by IDAPA 58.01.17.601.08.g.
CA-00143-02 July 1, 2007	Submit a copy and secure Department acceptance of an Operation and Maintenance Manual for the Gozzer Ranch wastewater collection, treatment, and disposal system. This document shall include a Waste Solids Management Plan addressing the permittee's management of waste sludge.
CA-00143-03 July 1, 2007	Submit and secure Department acceptance of record drawings for the public drinking water system and wastewater collection, treatment, and disposal system serving Gozzer Ranch Golf and Lake Club.
CA-00143-04 July 1, 2007	Submit evidence that all operating personnel hold operator licenses appropriate for a Class III wastewater treatment system.
CA-00143-05 July 1, 2012	Secure compliance of the biological treatment process of the USFilter-Memcor MemJet Xpress 100 package membrane filtration system with the Reliability and Redundancy Requirements in IDAPA 58.01.17.601.07.



## **H. Special Conditions**

Special Conditions are additions and / or modifications to the Standard Conditions and Limits in this permit. The individual Special Conditions will state which Standard Condition or Limit is to be modified.

## I. Standard Permit Limits and Conditions

The Permittee is allowed to discharge Class A wastewater into the Gozzer Ranch Golf Course Irrigation Pond for reclamation and reuse by Discovery Land Company within the Gozzer Ranch development as irrigation of golf course and common areas as prescribed in the tables below and in accordance with all other applicable permit conditions and schedules.

Category	Permitted Limits and Conditions
<b>Type of Wastewater</b>	Class A Municipal Wastewater as defined by the Rules for the Reclamation and Reuse of Municipal and Industrial Wastewater.
<b>Application Site Area</b>	Slow Rate Irrigation on Gozzer Ranch golf course and common areas during periods of non-use by the public or residents.
<b>Application Season</b>	Growing Season only, April 15 to September 15 or as otherwise allowed.
<b>Maximum Hydraulic Loading Rate, Growing Season</b>	Agronomic rates as determined by the Golf Course Superintendent based on monitoring application areas for irrigation water needs.
<b>Groundwater Protection</b>	Ground Water Quality shall be in compliance with Idaho <i>Ground Water Quality Rule</i> IDAPA 58.01.11 as demonstrated by maintenance of existing drinking water quality in the two ground water supply wells serving the Arrow Point public drinking water system.
<b>Grazing</b>	Grazing is not allowed.
<b>Allowable crops</b>	Crops grown for human consumption are not allowed.
<b>Signing</b>	Warning signs and labels indicating "Warning: Reclaimed Wastewater – Do not Drink" shall be posted at all locations with public access or requiring signage by Section 601.02 of the Rules for the Reclamation and Reuse of Municipal and Industrial Wastewater.
<b>Turbidity</b>	Daily arithmetic mean of all daily measurements shall not exceed 0.2 NTU and no measurement at any time shall exceed 0.5 NTU based on continuous monitoring prior to disinfection.  When continuous turbidity monitoring falls for more than five minutes below the turbidity standards, filtered wastewater shall be automatically diverted to the Bypass Storage Lagoon until such time as the effluent meets the turbidity standard.

<b>Category</b>	<b>Permitted Limits and Conditions</b>
<b>Nutrient Removal</b>	Total nitrogen at the point of disinfection compliance shall not exceed thirty (30) mg/l based on monthly arithmetic mean of weekly composite samples.
<b>Disinfection Level</b>	The median number of total coliform organisms shall not exceed 2.2/100 ml and no single sample shall exceed 23/100 ml. based on the bacteriological results from the last seven (7) days analyzed. Daily total coliform sampling from the point of disinfection compliance shall be done.
<b>Buffer Distances</b>	Effluent shall not be applied closer than 100 feet from any private drinking water well or fifty (50) feet from surface waters.
<b>Standby Power</b>	Sufficient standby power capacity shall be provided and maintained at all times capable of operating treatment and distribution works.
<b>Biochemical Oxygen Demand (BOD5)</b>	BOD5 shall not exceed 10 mg/l based on monthly arithmetic mean determined by weekly composite sampling.
<b>pH</b>	Based on daily grab samples, pH shall be between 6.0 and 9.0.
<b>Utility User Agreement</b>	North Kootenai Water District shall execute a utility user agreement with the owners/operators of the Gozzer Ranch golf course per IDAPA 58.01.17.60108.g.
<b>Operator Classification</b>	Class III wastewater treatment system classification shall be held by all Gozzer Ranch wastewater operators.

## J. Standard Monitoring Requirements

- 1) Appropriate analytical methods, as given in the *Handbook for Land Application of Municipal and Industrial Wastewater, April 1996*, or as approved by the Idaho Department of Environmental Quality (hereinafter referred to as DEQ), shall be employed. A description of approved sample collection methods, appropriate analytical methods and companion QA/QC protocol shall be included in the Operation and Maintenance Manual.
- 2) The permittee shall monitor and measure parameters as stated in the Facility Monitoring Schedule in this section. Samples shall be collected at times and locations that represent typical environmental and process parameters being monitored.
- 3) Monitoring locations are described in Section E. Environmental Monitoring Serial Numbers.
- 4) Monitoring is required at the frequency shown in the table below if wastewater is applied anytime during the time period shown.

### Facility Monitoring Schedule

Frequency	Monitoring Point	Description and Type of Monitoring	Parameters
Daily	Effluent Pump Station	Recording in-line flow meter measuring the effluent volume.	Gallons per day
Daily	Equalization Pump Station	Operating hours from elapsed time meters for plant influent.	Hours converted to gallons
Daily when used	Bypass pond sump pump	Operating hours for returned wastewater.	Hours converted to gallons
Daily when used	Sludge storage tank	Volume of diverted waste activated sludge	Gallons
Daily	Point of turbidity compliance at the Membrane Operating System discharge	Continuous Recording Turbidimeter	Daily arithmetic mean and maximum recorded value in Nephelometric Turbidity Units (NTU)
Daily	Discharge of wastewater following filtration and disinfection at the point of disinfection compliance.	Grab samples for total coliform bacteria	organism/100 ml
Daily	Any location following treatment	Grab sample for pH	pH units
Weekly	Point of disinfection compliance	Weekly composite sampling for total nitrogen	mg/l
Weekly	Any location following treatment	Weekly composite sampling for five day Biological Oxygen Demand (BOD5)	mg/l
As needed	Membrane Operating System	Cleaning in Place of Membrane modules	Frequency, Cleaning Agent used, and Membrane module number

## **K. Standard Reporting Requirements**

The permittee shall submit an Annual Wastewater Reuse Report ("Annual Report") prepared by a competent environmental professional no later than January 31 of each year which shall cover the previous year from January 1 through December 31. The Annual Report shall include results for monitoring required in Section E, status of compliance activities, and an interpretive discussion of all monitoring data with particular respect to environmental impacts by the facility.

## L. Standard Permit Conditions: Procedures and Reporting

1. The permittee shall at all times properly maintain and operate all structures, systems, and equipment for treatment, operational controls and monitoring, which are installed or used by the permittee to comply with all conditions of the permit or the Rules for the Reclamation and Reuse of Municipal and Industrial Wastewater, in conformance with a DEQ approved, current Plan of Operations (Operations and Maintenance Manual) which describes in detail the operation, maintenance, and management of the wastewater treatment system. This Plan of Operations shall be updated as necessary to reflect current operations.

2. Wastewater(s) or recharge waters applied to the land surface must be restricted to the premises of the application site unless permission has been obtained from the DEQ authorizing a discharge into the waters of the State as stated in IDAPA 58.01.02.600.02.

3. Wastewater must not create a public health hazard or nuisance condition as stated in IDAPA 58.01.02.600.03. In order to prevent public health hazards and nuisance conditions the permittee shall require the users of the Class A effluent to:

- Apply wastewater as evenly as practicable to the treatment area;
- Prevent organic solids (contained in the wastewater) from accumulating on the ground surface to the point where the solids putrefy or support vectors or insects; and
- Prevent wastewater from ponding in the fields to the point where the ponded wastewater putrefies or supports vectors or insects.

4. As a result of the reuse of wastewater, ground water of the state must not contain contaminants exceeding those values as referenced under IDAPA 58.01.11.200a, b and c of the Ground Water Quality Rule, unless otherwise specified in this permit.

5. The permittee shall:

- Require the users of the Class A effluent to manage the wastewater reuse sites as an agronomic operation where vegetative cover is grown to utilize the nutrients and minerals in the wastewater, and,
- Not hydraulically overload any particular areas of the wastewater reuse sites.

6. All waste solids, including dredgings and sludges, shall be utilized or disposed in a manner which will prevent their entry, or the entry of contaminated drainage or leachate therefrom, into the waters of the state such that health hazards and nuisance conditions are not created; and to prevent impacts on designated beneficial uses of the ground water and surface water. The permittee's management of waste solids shall be governed by the terms of the DEQ approved Waste Solids Management Plan, which upon approval shall be an enforceable portion of this permit.

7. If the permittee intends to continue operation of the permitted facility after the expiration of an existing permit, the permittee shall apply for a new permit at least six months prior to the expiration date of the existing permit in accordance with the Rules for the Reclamation and Reuse of Municipal and Industrial Wastewater and include seepage tests on the all lagoons per latest DEQ procedures.

8. The permittee shall allow the Director of the Idaho Department of Environmental Quality or the Director's designee (hereinafter referred to as Director), consistent with Title 39, Chapter 1, Idaho Code, to:

- Enter the permitted facility,
- Inspect any records that must be kept under the conditions of the permit.
- Inspect any facility, equipment, practice, or operation permitted or required by the permit.
- Sample or monitor for the purpose of assuring permit compliance, any substance or any parameter at the facility.

9. The permittee shall report to the Director under the circumstances and in the manner specified in this section:

- In writing thirty (30) days before any planned physical alteration or addition to the permitted facility or activity if that alteration or addition would result in any significant change in information that was submitted during the permit application process.
- In writing thirty (30) days before any anticipated change which would result in non-compliance with any permit condition or these regulations.
- Orally within twenty-four (24) hours from the time the permittee became aware of any non-compliance which may endanger the public health or the environment at telephone numbers provided in the permit by the Director (see below)

DEQ Regional Office: see Permit Certification Page or  
Emergency 24 Hour Number 1-800-632-8000

d. In writing as soon as possible but within five (5) days of the date the permittee knows or should know of any non-compliance unless extended by the DEQ. This report shall contain:

- A description of the non-compliance and its cause;
- The period of non-compliance including to the extent possible, times and dates and, if the non-compliance has not been corrected, the anticipated time it is expected to continue; and
- Steps taken or planned to reduce or eliminate reoccurrence of the non-compliance.

e. In writing as soon as possible after the permittee becomes aware of relevant facts not submitted or incorrect information submitted, in a permit application or any report to the Director. Those facts or the correct information shall be included as a part of this report.

10. The permittee shall take all necessary actions to prevent or eliminate any adverse impact on the public health or the environment resulting from permit noncompliance.

11. The permittee shall determine (on an on-going basis) if any noxious weed problems relate to the permitted sites. If problems are present, coordinate with the Idaho Department of Agriculture or the local County authority regarding their requirements for noxious weed control. Also address these control operations in an update to the Operations and Maintenance Manual.

## **M. Standard Permit Conditions: Modifications, Violations, and Revocations**

1. The permittee shall furnish to the Director within reasonable time, any information including copies of records, which may be requested by the Director to determine whether cause exists for modifying, revoking, re-issuing, or terminating the permit, or to determine compliance with the permit or these regulations.
2. Both minor and major modifications may be made to this permit as stated in IDAPA 58.01.17.700.01 and 02 with respect to any conditions stated in this permit upon review and approval of the DEQ.
3. Whenever a facility expansion, production increase or process modification is anticipated which will result in a change in the character of pollutants to be discharged or which will result in a new or increased discharge that will exceed the conditions of this permit, or if it is determined by the DEQ that the terms or conditions of the permit must be modified in order to adequately protect the public health or environment, a request for either major or minor modifications must be submitted together with the reports as described in G. Reporting Requirements, and plans and specifications for the proposed changes. No such facility expansion, production increase or process modification shall be made until plans have been reviewed and approved by the DEQ and a new permit or permit modification has been issued.
4. Permits shall be transferable to a new owner or operator provided that the permittee notifies the Director by requesting a minor modification of the permit before the date of transfer.
5. Any person violating any provision of the Rules for the Reclamation and Reuse of Municipal and Industrial Waste, or any permit or order issued thereunder shall be liable for a civil penalty not to exceed ten thousand dollars (\$10,000) or one thousand dollars (\$1,000) for each day of a continuing violation, whichever is greater. In addition, pursuant to Title 39, Chapter 1, Idaho Code, any willful or negligent violation may constitute a misdemeanor.
6. The Director may revoke a permit if the permittee violates any permit condition or the Rules for the Reclamation and Reuse of Municipal and Industrial Wastewater.
7. Except in cases of emergency, the Director shall issue a written notice of intent to revoke to the permittee prior to final revocation. Revocation shall become final within twenty (20) days of receipt of the notice by the permittee, unless within that time the permittee request an administrative hearing in writing to the Director.
8. The Director shall notify the permittee in writing of any revocation hearing at least twenty (20) days prior to the date set for such hearing. The hearing shall be conducted in accordance with Title 67, Chapter 52, Idaho Code.
9. If, pursuant to Idaho Code § 67-5247, the Director finds the public health, safety or welfare requires emergency action, the Director shall incorporate findings in support of such action in a written notice of emergency revocation issued to the permittee. Emergency revocation shall be effective upon receipt by the permittee. Thereafter, if requested by the permittee in writing the Director shall provide the permittee a revocation hearing and prior notice thereof. Such hearings shall be conducted in accordance with Title 67, Chapter 52, Idaho Code.
10. The provisions of this permit are severable and if a provision or its application is declared invalid or unenforceable for any reason, that declaration will not affect the validity or enforceability of the remaining provisions.
11. The permittee shall notify the DEQ at least six (6) months prior to permanently removing any permitted reuse site from service. Prior to commencing site closure activities, the permittee shall: a) participate in a pre-site closure meeting with the DEQ; b) develop a site closure plan that identifies specific closure or cleanup tasks with scheduled task completion dates in accordance with agreements made at the pre-site closure meeting; and c) submit the completed site closure plan to the DEQ for review and approval within forty-five (45) days of the pre-site closure meeting. The permittee must complete the DEQ approved site closure plan.